

IN THE CLAIMS:

Please amend Claims 1, 2, 4, 7-12, 14-19, 21, 23-27, 29- 32, 34, 35, 37, and 39-42 as follows.

1. (Currently Amended) An information processing apparatus comprising:

a) first input means for inputting encoded data of information data;

second input means for inputting security data for protecting the information data;

b) ~~generation means for generating security data to be used to protect the information~~  
data;

c) ~~encoding means for encoding the information data to generate encoded data;~~

d) extraction means for extracting a ~~unique predetermined~~ start code of a frame group  
comprising at least one frame, indicating a specific meaning from the encoded data  
included in ~~within a security data section to which security is set and which is to be~~  
protected in accordance with the security data;

e) superimposing means for superimposing the security data on the ~~predetermined~~ start  
code;

f) ~~scrambling means for scrambling the encoded data except for the predetermined~~  
~~code within the security section; and~~

g) output means for outputting the ~~predetermined code processed by said~~  
~~superimposing means and the~~ encoded data processed by ~~said~~ scrambling means for  
scrambling the encoded data other than the start code in the data section to which the  
security is set.

2. (Currently Amended) An apparatus according to Claim 1, wherein the security data contains key information to be used by ~~said~~ the scrambling means.

3. (Original) An apparatus according to Claim 1, wherein the security data contains information for an authentication process.

4. (Currently Amended) An apparatus according to Claim 1, wherein the information data is image data, and ~~said encoding means generates~~ the encoded data includes an MPEG-4 bitstream.

5. (Original) An apparatus according to Claim 4, further comprising IPMP encoding means for generating IPMP data indicating information that pertains to the security, and wherein said output means outputs the IPMP data generated by said IPMP encoding means.

6. (Original) An apparatus according to Claim 1, further comprising enciphering means for enciphering the security data, and wherein said superimposing means superimposes the security data enciphered by said enciphering means.

7. (Currently Amended) An apparatus according to Claim 1, wherein the start predetermined code of the frame group comprising at least one frame to be extracted by said extraction means is a start code of a predetermined frame, a start code of a predetermined frame group, or a start code of a predetermined sequence.

8. (Currently Amended) An information processing apparatus comprising:

a) input means for inputting image encoded data comprising: in which security data is adaptively superimposed on

a unique predetermined start code of a frame group, comprising at least one frame, the start code of the frame group including security data adaptively superimposed thereon; in the encoded data, which indicates a specific meaning; and the

image encoded data except for other than the predetermined start code that is adaptively scrambled in accordance with the security data;

b) code extraction means for extracting from the image encoded data a code which is located at a position where the predetermined start code is present;

c) detection means for detecting the security data from the extracted code;

d) descrambling means for descrambling the image encoded data other than the start code that is adaptively scrambled, in accordance with a detection result of said detection means; and

e) decoding means for decoding the image encoded data descrambled by said descrambling means.

9. (Currently Amended) An apparatus according to Claim 8, wherein the security data contains authentication data to be used to check the authenticity of the security data, and said apparatus further comprises authentication means for checking the authenticity of the security data.

10. (Currently Amended) An apparatus according to Claim 9, wherein said descrambling means descrambles the scrambled image encoded data in accordance with a checking result of said authentication means.

11. (Currently Amended) An apparatus according to Claim 8, wherein the security data is enciphered security data, and said apparatus further comprises deciphering means for deciphering the enciphered security data.

12. (Currently Amended) An apparatus according to Claim 8, wherein the image encoded data is MPEG-4 bitstream data.

13. (Original) An apparatus according to Claim 12, wherein said input means inputs IPMP data indicating information which pertains to security.

14. (Currently Amended) An apparatus according to Claim 13, wherein the IPMP data contains authentication data to be used to check the authenticity of the security data, and said apparatus further comprises authentication means for checking the authenticity of the security data in accordance with the authentication data.

15. (Currently Amended) An apparatus according to Claim 14, wherein said descrambling means descrambles scrambled image encoded data in accordance with a checking result of said authentication means.

16. (Currently Amended) An apparatus according to Claim 15, wherein the security data is enciphered data, and said apparatus further comprises deciphering means for deciphering the enciphered security data.

17. (Currently Amended) An apparatus according to Claim 8, wherein the ~~predetermined~~ start code of the frame group comprising the at least one frame is a start code of a predetermined frame, a start code of a predetermined frame group, or a start code of a predetermined sequence.

18. (Currently Amended) An information processing method comprising the steps of:

- a) inputting encoded data of information data;
- ~~inputting security data for protecting the information data;~~
- b) ~~generating security data to be used to protect the information data;~~
- c) ~~encoding the information data to generate encoded data;~~
- d) extracting a ~~unique predetermined~~ start code indicating a specific meaning of a frame group comprising at least one frame from the encoded data included in ~~within~~ a security data section to which security is to be set and which is to be protected in accordance with the security data;
- e) superimposing the security data on the ~~predetermined~~ start code;
- f) ~~scrambling the encoded data except for the predetermined code within the security section;~~ and

g) outputting the ~~superimposed predetermined code and the scrambled~~ encoded data  
processed in a step of scrambling the encoded data other than the start code in the data  
section to which the security is set.

19. (Currently Amended) A method according to Claim 18, wherein the security data  
contains key information to be used in ~~said~~ the scrambling step.

20. (Original) A method according to Claim 18, wherein the security data contains  
information for an authentication process.

21. (Currently Amended) A method according to Claim 18, wherein ~~said~~ the encoded  
encoding data step includes ~~a step of generating~~ an MPEG-4 bitstream.

22. (Original) A method according to Claim 21, further comprising an IPMP encoding  
step of generating IPMP data indicating information that pertains to the security, and  
wherein said output step includes a step of outputting the IPMP data generated in the IPMP  
encoding step.

23. (Currently Amended) A method according to Claim 18, further comprising an  
enciphering step of enciphering the security data, and wherein said superimposing step  
includes a step of superimposing the security data enciphered in said enciphering step on  
the start code.

24. (Currently Amended) A method according to Claim 18, wherein the ~~predetermined start code of the frame group comprising the at least one frame to be extracted in said extraction step~~ is a start code of a predetermined frame, a start code of a predetermined frame group, or a start code of a predetermined sequence.

25. (Currently Amended) An information processing method comprising the steps of:

a) inputting image encoded data comprising: ~~in which security data is adaptively superimposed on~~

~~a unique predetermined start code of a frame group in the encoded data, comprising at least one frame, the start code of the frame group including security data adaptively superimposed thereon; which indicates a specific meaning, and the~~

image encoded data except for other than the predetermined start code that is adaptively scrambled in accordance with the security data;

b) extracting from the image encoded data a code which is located at a position where the ~~predetermined start code~~ is present;

c) detecting the security data from the extracted code;

d) descrambling the image encoded data other than the start code in accordance with the detection result of said detecting step; and

e) decoding the descrambled image encoded data.

26. (Currently Amended) A method according to Claim 25, wherein the security data contains authentication data to be used to check the authenticity of the security data, and

said method further comprises an authentication step of checking the authenticity of the security data.

27. (Currently Amended) A method according to claim 26, wherein said descrambling step includes a step of descrambling scrambled image encoded data in accordance with a checking result in said authentication step.

28. (Original) A method according to Claim 25, wherein the security data is enciphering data, and said method further comprises as deciphering step of deciphering the enciphered security data.

29. (Currently Amended) A method according to Claim 25, wherein the image encoded data is MPEG-4 bitstream data.

30. (Currently Amended) A method according to Claim 29, wherein said ~~input~~ inputting step includes a step of inputting IPMP data indicating information which pertains to security.

31. (Currently Amended) A method according Claim 30, wherein the IPMP data contains authentication data to be used to check the authenticity of the IPMP data, and said method further comprises an authentication step of checking the authenticity of the IPMP data in accordance with the authentication data.



32. (Currently Amended) A method according to Claim 31, wherein said descrambling step includes a step of descrambling scrambled image encoded data in accordance with a checking result in said authentication step.

33. (Original) A method according to Claim 31, wherein the security data is enciphered data, and said method further comprises a deciphering step of deciphering the enciphered security data.

34. (Currently Amended) A method according to Claim 25, wherein the predetermined start code of the frame group comprising the at least one frame is a start code of a predetermined frame, a start code of a predetermined frame group, or a start code of a predetermined sequence.

35. (Currently Amended) An information processing method comprising the steps of:

- a) inputting image encoded data that forms a hierarchical structure;
- b) extracting a predetermined start code indicating a head of a predetermined layer from the image encoded data; and
- c) superimposing security data for image protection onto the predetermined start code extracted in said ~~extraction~~ extracting step.

36. (Original) A method according to Claim 35, further comprising an enciphering step of enciphering the image encoded data in accordance with the security data.

37. (Currently Amended) An information processing method comprising the steps of:

a) inputting encoded data in which security data is superimposed on a ~~predetermined~~ start code indicating a head of a predetermined layer of image encoded data that forms a hierarchical structure;

b) extracting from the encoded data a code which is located at a position where the ~~predetermined~~ start code is present;

c) detecting the security data from the extracted code; and

d) decoding the encoded data in accordance with a detection result in said detecting step.

38. (Original) A method according to Claim 37, wherein the encoded data is enciphered data, and said decoding step includes a step of deciphering the enciphered encoded data.

39. (Currently Amended) A computer readable storage medium which stores a control program that implements an information ~~image~~ processing method ~~cited~~ recited in Claim 18.

40. (Currently Amended) A computer readable storage medium which stores a control program that implements an information ~~image~~ processing method ~~cited~~ recited in Claim 25.

41. (Currently Amended) A computer readable storage medium which stores a control program that implements an information ~~image~~ processing method ~~cited~~ recited in Claim 35.

42. (Currently Amended) A computer readable storage medium which stores a control program that implements an ~~image~~ information processing method ~~cited~~ recited in Claim 37.